

C. Remarks

1) Claim cancellations

Claim 12, which erroneously repeated material already present in its base claim, is canceled.

Responsive to Examiner's requirement for restriction, Claims 24-28 are canceled.

Claims 15 and 18, which recited material now incorporated into their respective base claims, are also canceled.

2) Examiner's finding of allowable subject matter in dependent claims 15 and 20.

Claims 15 and 20 both described summing respective outputs from the measurement circuits and for providing a detection output if that sum exceeds a selected threshold. Independent Claims 1, 13 and 18 are amended to incorporate this limitation, which the Examiner found to provide a patentable distinction over the prior art. These amendments are believed to place Claims 1-23 in condition for allowance and to traverse the rejections under 35 USC §103(a) over cited combinations of the Philipp, Shahoian and Philipp2 references. Reconsideration is requested.

3) New Claim 29 was derived as-filed Claim 1 by replacing the general 'linear combination' recital with a description of a specific arrangement for deriving the desired linear output. Neither the Philipp nor the Shahoian reference describes a means for "calculating a ratio of a selected one of the differences to a sum of the differences".

Date: 12/21/2005



David A. Kiewit

Mail: 5901 Third Street South
St. Petersburg FL 33705-5305

Reg. No. 34640

(727) 866-0669 voice/fax